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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/827,593	04/06/2001	Jari Pekka Hamalainen	460-006859-US (C01)	3070
2512	7590	08/03/2010		
Perman & Green, LLP 99 Hawley Lane Stratford, CT 06614			EXAMINER SHAW, YIN CHEN	
			ART UNIT 2439	PAPER NUMBER
			MAIL DATE 08/03/2010	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

09/827,593

**Applicant(s)**

HAMALAINEN ET AL.

**Examiner**

Yin-Chen Shaw

**Art Unit**

2439

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 June 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 19, 21, 23-26, 28, 31-48, 55-59, 61-64, 66-70, 74-82, 84-94, 96, and 133-135 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 19, 21, 23-26, 28, 31-48, 55-59, 61-64, 66-70, 74-82, 84-94, 96 and 133-135 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-804)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. This written action is responding to the Request of Continued Examination (RCE) dated on 06/04/2010.
2. Claims 19, 21, 23-26, 29, 31-35, 44-48, 55-59, 61-64, 68-70, 82, 84-85, 93-94, 96, and 133 have been amended. Claims 20, 22, 27, 29-30, 49-54, 60, 65, 71-73, 83, 95, 97-132, and 136-156 are further canceled from examination. The status of all other claims remains previously presented.
3. Claims 19, 21, 23-26, 28, 31-48, 55-59, 61-64, 66-70, 74-82, 84-94, 96, and 133-135 have been examined and rejected.
4. Claims 19, 21, 23-26, 28, 31-48, 55-59, 61-64, 66-70, 74-82, 84-94, 96, and 133-135 are pending.

### **Response to Arguments**

5. Applicant's amendment, filed on Jun. 04, 2010, has claims 19, 21, 23-26, 29, 31-35, 44-48, 55-59, 61-64, 68-70, 82, 84-85, 93-94, 96, and 133 amended, claims 20, 22, 27, 29-30, 49-54, 60, 65, 71-73, 83, 95, 97-132, and 136-156 canceled from examination, and the status of all other claims remains previously presented.
6. Examiner respectfully disagrees with Applicant's argument regarding the amendment overcome the combination of cited prior art of record and Rasmussen teaches away from integrating encryption and display functionalities

in any one of the various devices, and would therefore also teach away from providing in a mobile station and claimed features relating to monitoring network control signals, interpreting the monitored network control signals, starting enciphering and indicating that an enciphered mode of communication for user data is set on in a mobile communication network. It should be first pointed out that Talbot's teaching of the control parameter/indicator between the base station and mobile station is an indication to the mobile station as to whether enciphering of user data is to be performed (see Col. 10, lines 47-55 from Talbot), and Ramussen teaches the amended claim limitation regarding "enciphering mode of communication for use data in the mobile communication network" by disclosing the secure mode of the data (i.e., user data) communication (see Col. 5, lines 21-30 and Col. 7, lines 5-25 from Ramussen).

Additionally, the teaching from Ramussen on the ECOM as a unit by itself does not teach away integrating encryption and display functionalities from the claimed features because Ramussen discloses that ECOM unit can be interfaced (through standard RJ port) (see Col. 5, lines 44-50 from Ramussen). That is, contrary to Applicant's assertion, integrating encryption and display functionalities is achieved by the fact that ECOM unit is detachably attached to mobile station and capable of performing the claimed features. Thus, the rejection based on the previously cited art of record is maintained.

### **Claim Rejections - 35 USC § 103**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 19, 21, 23, 28, 31, 36, 44, 46-48, 55-59, 61-62, 66, 68, 74, 77-79, 81-82, 84-87, 90-91, 93-94, 96, and 133-134 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sasuta et al. (U. S. Patent 5,502,767) and further in view of Talbot (U.S. Patent 4,555,805) and Rasmussen et al. (U.S. Patent 5,222,136).

#### **As per claims 19, 59, and 82:**

Sastuta et al. disclose "a method and apparatus for determining whether an enciphered mode of communication for user data is set on or off in a mobile communication network, the method comprising:

monitoring by a mobile station in the mobile communication network of network control signals received by the mobile station from the mobile communication network over an air interface to detect a cipher mode command message (Col. 3, line 60 to Col. 4, line 30; and Fig. 1 from Sasuta et al.), the cipher mode command message configured to request the mobile station to start enciphering (Col. 4, lines 4-17 from Sasuta et al.);

Sasuta et al. do not expressly disclose other remaining limitations of the claim.

However, Talbot discloses responsive to detection by the mobile station of a cipher mode command message in the monitored network control signals received from the mobile communication network (Col. 4, lines 18-30 and 60-65 and Col. 5, lines 41-43 from Sasuta et al.);

interpreting said detection of a cipher mode command message as an indication that said enciphered mode of communication for user data is set on in the mobile communication network (Col. 8, lines 3-12 and 45-50 from Talbot);

starting enciphering of user data in the mobile station (Col. 7, lines 50-54 and Col. 10, lines 4-8 from Talbot).

Therefore, it would have been obvious at the time of invention was made for having ordinary skill in the art to modify Sasuta's teaching with Talbot since one would be motivated to maintaining secure information synchronization on a control channel that will not reduce the efficiency of a secure radio communication system (Col. 2, lines 32-34 from Sasuta et al.).

Sasuta et al. and Talbot do not expressly disclose the limitation regarding indicating to a user of the mobile station that said enciphered mode of communication for user data is set on in the mobile

communication network, using a cipher mode indicator provided in the mobile station.

However, Rasmussen et al. disclose that the limitation regarding "indicating to a user of the mobile station that said enciphered mode of communication for user data is set on in the mobile communication network, using a cipher mode indicator provided in the mobile station" in (Col. 5, lines 21-30; Col. 7, lines 7-25; and Fig. 3 from Rasmussen et al.).

Therefore, it would have been obvious at the time of invention was made for one having ordinary skill in the art to modify the teaching from Sasuta and Talbot with Talbot since one would be motivated to protect each type communications device without expensively using separate security systems (Col. 1, lines 66-68 from Rasmussen et al.).

**As per claims 21 and 61:**

Sasuta et al., Talbot, and Rasmussen et al. disclose "a method and apparatus according to claims 19 and 59, further comprising: responsive to a lack of detection of a cipher mode command message by the mobile station in the monitored network control signals received from the mobile communication network (Abstract, lines 1-8 and col. 4, lines 23-31 from Talbot);

interpreting said lack of detection of a cipher mode command message as an indication that said enciphered mode of communication for user data is set off in the mobile communication network (Abstract, lines 1-8 and col. 4, lines 23-31 from Talbot); and  
indicating to a user of the mobile station that said enciphered mode of communication for user data is set off in the mobile communication network, using the cipher mode indicator provided in the mobile station (col. 7, lines 5-25 from Rasmussen).

**As per claims 23 and 62:**

Sasuta et al., Talbot, and Rasmussen et al. disclose "a method and apparatus according to claims 19 and 59, wherein the apparatus is configured to determine whether said enciphered mode of communication for user data is set on or off during establishment of communication between the mobile communication network and the mobile station" in ((Col. 4, lines 4-17 and 39-59 from Sasuta et al.) and (Col. 8, lines 36-50 from Talbot)).

**As per claims 28 and 68:**

Sasuta et al., Talbot, and Rasmussen et al. disclose "a method and apparatus according to claims 19 and 59, further comprising indicating a



ciphering mode a change in ciphering mode for user data to a user of the mobile station" in ((Col. 4, lines 4-17 and 39-59 from Sasuta et al.) and (Col. 11, line 59 to Col. 12, line 3 and Col. 8, lines 3-25; Col. 9, lines 39-50 from Talbot)).

**As per claims 36 and 74:**

Sasuta et al., Talbot, and Rasmussen et al. disclose "an apparatus according to claims 19 and 59, wherein the mobile stations comprises of: a radio resource management block and a cipher indicator memory block, wherein said means for monitoring signals sent from the mobile communication network to the mobile station and said means for determining if said monitored signals comprise a cipher mode command message are arranged in the radio resource management block and a cipher mode indication data field is maintained in the cipher indication memory block, the radio resource management block being further arranged to set a value of the cipher mode indication data field to correspond with cipher indication data in said cipher mode command message received from the mobile communication network" (Col. 3 line 24-39; Col. 3, line 60 to Col. 4 line 17; Fig. 1 from Sasuta et al.) and (Col. 11, line 59 to Col. 12, line 3 and Col. 8, lines 3-25; Col. 9, lines 39-50 from Talbot).

**As per claims 44 and 46-47:**

Sasuta et al., Talbot, and Rasmussen et al. disclose "a method according to claim 19. Sasuta et al. disclose the limitation regarding "said enciphering mode is set on or off" in (Col. 4, lines 4-17 and 39-59 from Sasuta et al.).

In addition, Sasuta et al., Talbot, and Rasmussen et al. disclose wherein the mobile station is capable of a first type of user data communication and indicating to a user of the mobile station whether an enciphered mode is set on or off in the mobile communication network for each of said first and second types of user data communication". And indicating a ciphering mode of each of said first and second types of user communication and change of modes of communications to a user of the mobile station" in (Col. 5, lines 21-30 and Col. 7, lines 7-25 from Rasmussen et al.).

**As per claim 48:**

Sasuta et al., Talbot, and Rasmussen et al. disclose "a method according to claim 19, wherein a first mobile station and a second mobile station are in communication with each other through at least one mobile communication network, the method comprising indicating the ciphering mode for user data communication between the mobile communication network and the first mobile station to a user of the second mobile

station" in ((Col. 5, lines 21-30 and Col. 7, line 7-25 from Rasmussen et al.) and (Col. 11, line 59 to Col. 12, line 3 and Col. 8, lines 3-25; Col. 9, lines 39-50 from Talbot)).

**As per claim 55:**

Sasuta et al., Talbot, and Rasmussen et al. disclose "a method according to claim 19, comprising using the mobile station in communication with a terminal in a fixed line communication network, and the method further comprising indicating a ciphering mode used in user data communication between the fixed line communication network and the terminal in the fixed line communication network to a user of the mobile station" in ((Col. 11, line 59 to Col. 12, line 3 and Col. 8, lines 3-25; Col. 9, lines 32-50; Col. 10, lines 10-22 from Talbot) and (Col. 5, lines 21-30 and Col. 7, line 7-25 from Rasmussen et al.)).

**As per claim 56:**

Sasuta et al., Talbot, and Rasmussen et al. disclose "a method according to claim 55, wherein the mobile station sends an inquiry message to the terminal in the fixed line communication network to determine the ciphering mode used in use data communication between the fixed line communication network and said terminal in the fixed line

network" in ((Col. 5, lines 21-30 and Col. 7, line 7-25 from Rasmussen et al.) and (Col. 3, line 60 to Col. 4, line 12; Col. 10, lines 10-22 from Talbot)).

**As per claim 57:**

Sasuta et al., Talbot, and Rasmussen et al. disclose "a method according to claim 56, wherein if the mobile station does not receive a response to said inquiry message, the mobile station indicates that the ciphering mode for user data is unknown" in ((Col. 9 lines 45-50 and 67-68; Col. 10, lines 1-8 from Talbot) and (Col. 5, lines 21-30 and Col. 7, line 7-25 from Rasmussen et al.)).

**As per claim 58:**

Sasuta et al., Talbot, and Rasmussen et al. disclose "a method according to claim 55, wherein if the mobile station receives a response to said inquiry message, but cannot interpret said response, the mobile station indicates that the ciphering mode for user data is unknown" in ((Col. 4, lines 58-68 from Talbot) and (Col. 5, lines 21-30 and Col. 7, line 7-25 from Rasmussen et al.)).

**As per claims 77, 79, 81, 87, and 93:**

Sasuta et al., Talbot, and Rasmussen et al. disclose “an apparatus according to claims 76, 78, 80, 86, and 92, wherein user interface block is configured to set the cipher mode indicator to a mode corresponding to the ciphering data provided by the cipher indicator memory block” in ((Col. 3, lines 27-39; Col. 3, line 60 to Col. 4, line 17; Fig. 1 from Sasuta et al.), (Col. 4, lines 40-54; Col. 11, line 59 to Col. 12, line 3; Col. 8, lines 3-25; Col. 9, lines 32-50 from Talbot), and (Col. 3, lines 8-25; Col. 7, lines 7-25; and Fig. 3 from Rasmussen et al.)).

**As per claims 78, 90, and 91:**

Sasuta et al., Talbot, and Rasmussen et al. disclose “an apparatus according to claims 74, 86, and 90, wherein the cipher indicator memory block is configured to send cipher information to the user interface block whenever the value in the cipher indicator memory block is changed” in ((Col. 3, lines 27-39; Col. 3, line 60 to Col. 4, line 17; Fig. 1 from Sasuta et al.), (Col. 4, lines 40-54; Col. 11, line 59 to Col. 12, line 3; Col. 8, lines 3-25; Col. 9, lines 32-50 from Talbot), and (Col. 3, lines 8-25; Col. 7, lines 7-25; and Fig. 3 from Rasmussen et al.)).

**As per claim 84:**

Sasuta et al., Talbot, and Rasmussen et al. disclose "a mobile station according to claim 82". Sasuta et al. disclose the limitation regarding "said enciphering mode is set on or off" in (Col. 4, lines 4-17 and 39-59 from Sasuta et al.).

Sasuta et al., Talbot, and Rasmussen et al. further disclose "wherein said apparatus further comprises means for interpreting a lack of detection of a cipher mode command message as an indication that said enciphered mode of communication for user data is set off in the mobile communication network and wherein the cipher mode indicator is further configured to indicate that said enciphered mode of communication for user data is set off in the mobile communication network, if responsive to a lack of detection of a cipher mode command message in the monitored network control signals received from the mobile communication network" in ((Col. 4, lines 4-17 and 39-59 from Sasuta et al.) and (Col. 4, lines 40-54; Col. 11, line 59 to Col. 12, line 3 and Col. 8, lines 3-25; Col. 9, lines 32-50; Col. 10, lines 10-22 from Talbot)).

**As per claims 85 and 94:**

Sasuta et al. disclose "a system for determining a ciphering mode to be used in communication between a mobile communication network and a mobile station in the mobile communication network, the mobile station

capable of communication in at least one enciphered mode of communication and at least one unciphered mode of communication" in (Col. 3 line 24-39; Col. 3, line 60 to Col. 4 line 17; Fig. 1 from Sasuta et al.), the system comprising:

a mobile communication network **[(Fig. 1 from Sasuta et al.)]**;

a mobile station **[(element 102 and 103 in Fig. 1 from Sasuta et al.)]**;

means in the mobile communication network for determining whether an enciphered mode of communication is on or off (Col. 3 line 24-39; Col. 3, line 60 to Col. 4 line 17; Fig. 1 from Sasuta et al.);

means in the mobile communication network for sending a cipher mode command message from the mobile communication network to the mobile station in a situation where said enciphered mode of communication is set on, said cipher mode command message configured to request the mobile station to start enciphering (Col. 3, lines 24-39; Col. 3, line 60 to Col. 4 line 17; Fig. 1 from Sasuta et al.);

means in the mobile station for monitoring network control signals sent from the mobile communication network to the mobile station over an air interface to detect a cipher mode command message (Col. 3, line 60 to Col. 4, line 30; and Fig. 1 from Sasuta et al.).

Sasuta et al. do not expressly disclose other remaining limitations of the claim.

However, Talbot discloses means in the mobile station for interpreting detection of a cipher mode command message as an indication that said enciphered mode of communication for user data is set on in the mobile communication network (Col. 4, lines 18-30 and 60-65 and Col. 5, lines 41-43 from Sasuta et al.);

means in the mobile station for starting enciphering of user data in the mobile station responsive to detection of a cipher mode command message in the monitored network control signals received from the mobile communication network (Col. 4, lines 18-30 and 60-65 and Col. 5, lines 41-43; Col. 7, lines 50-54 and Col. 10, lines 4-8 from Talbot).

Therefore, it would have been obvious at the time of invention was made for having ordinary skill in the art to modify Sasuta's teaching with Talbot since one would be motivated to maintaining secure information synchronization on a control channel that will not reduce the efficiency of a secure radio communication system (Col. 2, lines 32-34 from Sasuta et al.).

Sasuta et al. and Talbot do not expressly disclose the limitation regarding the cipher mode indicator in the mobile station for indicating to a user of the mobile station said enciphered mode of communication for user data is set on in the mobile communication network responsive to detection of a cipher mode command message in the monitored network control signals from the mobile communication network.



However, Rasmussen et al. disclose the limitation regarding "the cipher mode indicator in the mobile station for indicating to a user of the mobile station said enciphered mode of communication for user data is set on in the mobile communication network responsive to detection of a cipher mode command message in the monitored network control signals from the mobile communication network" in (Col. 5, lines 21-30; Col. 7, lines 7-25; and Fig. 3 from Rasmussen et al.).

Therefore, it would have been obvious at the time of invention was made for one having ordinary skill in the art to modify the teaching from Sasuta and Talbot with Talbot since one would be motivated to protect each type communications device without expensively using separate security systems (Col. 1, lines 66-68 from Rasmussen et al.).

**As per claim 86:**

Sasuta et al., Talbot, and Rasmussen et al. disclose "a mobile station according to claim 85, comprising a radio resource management block and a cipher indicator memory block and a user interface block, the cipher mode indicator block comprising a cipher mode indication data field, the radio resource management block being configured to set a value of the cipher mode indication data field to correspond with cipher indication data in a cipher mode command message received from the mobile communication network" in (Col. 3, line 60 to Col. 4, line 17 and

Col. 5, lines 5-18 from Sasuta et al.) and (Col. 8, lines 3-25 and Fig. 1 from Talbot)

**As per claim 96:**

Sasuta et al., Talbot, and Rasmussen et al. disclose "a system according to claim 94, further comprising means in the mobile station for interpreting a lack of detection of a cipher mode command message as an indication that said enciphered mode of communication for user data is set off in the mobile communication network (Abstract, lines 1-8 and col. 4, lines 23-31 from Talbot) and wherein the cipher mode indicator is further configured to indicate that said enciphered mode of communication of user data is set off in the mobile communication network (col. 7, lines 5-25 from Rasmussen) responsive to a lack of detection of a cipher mode command message in the monitored network control signals received from the mobile communication network (col. 4, lines 23-31 and col. 8, lines 38-50 from Talbot)".

**As per claims 31 and 66:**

Sasuta et al., Talbot, and Rasmussen et al. disclose "a method and apparatus according to claims 19 and 59 wherein said means for indicating to a user of the mobile station whether said enciphered mode of communication for user data is set on or off using the display unit" in

(Col. 5, lines 21-30; Col. 7, lines 5-25; and Fig. 3 from Rasmussen et al.).

**As per claims 133:**

Sasuta et al., Talbot, and Rasmussen et al. disclose a system according to claim 133. Sasuta et al. disclose the limitation regarding "said enciphering mode is set on or off" in (Col. 4, lines 4-17 and 39-59 from Sasuta et al.). Sasuta et al., Talbot, and Rasmussen et al. further disclose "wherein said enciphering mode of communication for user data is set by an operator of the mobile communication network." in (Col. 8, lines 38-50; Col. 10, lines 9-30 from Talbot).

**As per claims 134:**

Sasuta et al., Talbot, and Rasmussen et al. disclose "a system according to claim 94, wherein communication between the mobile communication network and the mobile station takes place at least in part over a radio link" in (Fig.1 from Sasuta et al.).

8. Claims 24-26, 63-64, and 135 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sasuta et al., Talbot, and Rasmussen et al. and further in view of Billstrom et al, US Patent No 5590133, hereinafter "Billstrom".

**As per claims 24-25 and 63-64:**

Sasuta et al., Talbot, and Rasmussen et al. disclose "a method and apparatus according to claims 19, 24, 59, and 63".

Sasuta et al. disclose the limitation regarding "said enciphering mode is set on or off" in (Col. 4, lines 4-17 and 39-59 from Sasuta et al.).

Sasuta et al., Talbot, and Rasmussen et al. do not expressly disclose "comprising determining whether said enciphering mode communication for user data is set on or off prior to establishment of data communication between the mobile communication network and the mobile station is performed by means of a location update procedure".

Nevertheless, Billstrom discloses the "apparatuses and Mobile stations for providing packet data communication in digital TDMA Cellular Systems" invention, which teaches "the determination of the ciphering mode to be used in data communication prior to establishment of data communication between the mobile communication network and the mobile station is performed by means of a location update procedure" in (Col 9, lines 20-50 and Col 10, lines 45-61).

Therefore, it would have been obvious at the time of the invention was made for one ordinary skill in the art at the time of invention to

incorporate Billstrom with ciphering mode teaching in Sasuta et al., Talbot, and Rasmussen et al. since one would be motivated to provide shared packet data channels optimized for packet data (lines 48-49, Col. 3 from Billstrom).

**As per claim 26:**

Sasuta et al., Talbot, and Rasmussen et al. disclose "a method according to claim 19. Sasuta et al. disclose the limitation regarding "said enciphering mode is set on or off" in (Col. 4, lines 4-17 and 39-59 from Sasuta et al.).

Sasuta et al., Talbot, and Rasmussen et al. do not expressly disclose the remaining limitation of the claim.

However, Billstrom discloses the "apparatuses and mobile stations for providing packet data communication in digital TDMA Cellular Systems" invention, which teaches a method of negotiating a cipher mode during a handover process (Col 8 lines 46 to Col 9 line 20, and Col 9 lines 20 to 67).

Therefore, it would have been obvious at the time of the invention was made for one ordinary skill in the art at the time of invention to incorporate Billstrom with ciphering mode teaching in Sasuta et al., Talbot, and Rasmussen et al. since one would be motivated to provide

shared packet data channels optimized for packet data (lines 48-49, Col. 3 from Billstrom).

**As per claims 135:**

Sasuta et al., Talbot, and Rasmussen et al. disclose a system according to claim 94. Sasuta et al., Talbot, and Rasmussen et al. do not expressly disclose the remaining limitation of the claim.

However, Billstrom discloses wherein the mobile communication network is a GSM network" in (Col. 1, line 62 from Sasuta et al.).

Therefore, it would have been obvious at the time of the invention was made for one ordinary skill in the art at the time of invention to incorporate Billstrom with ciphering mode teaching in Sasuta et al., Talbot, and Rasmussen et al. since one would be motivated to provide shared packet data channels optimized for packet data (lines 48-49, Col. 3 from Billstrom).

9. Claims 32-34, 67, and 69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sasuta et al., Talbot, and Rasmussen et al. and further view of Lewis et al, US Patent No. 6192255, hereinafter "Lewis".

**As per claims 32 and 67:**

Sasuta et al., Talbot, and Rasmussen et al. disclose "a method and apparatus according to claim 19". Sasuta et al., Talbot, and Rasmussen et al. do not disclose, "the mobile station comprises a light source the method comprising indicating to a user of the mobile station whether said enciphered mode of communication for user data is set on or off using the light source".

However, Lewis discloses "the mobile station comprises a light source and the ciphering mode used in data communication between the mobile communication network and the mobile station is indicated with the light source" and "change of ciphering mode with flashing light and/or acoustic signal" in (Col 5 lines 10-25; Col 20 lines 10-15; and Col 16 lines 40-67).

Therefore, it would have been obvious at the time of the invention was made for one having ordinary skill in the art to incorporate Sasuta et al., Talbot, and Rasmussen et al. with Lewis to display the information for alerting the user.

**As per claims 33 and 69:**

Sasuta et al., Talbot, and Rasmussen et al. disclose "a method and apparatus according to claims 28 and 68". Sasuta et al., Talbot, and Rasmussen et al. do not disclose, "the mobile station comprises a

display unit and an acoustic signal forming element, the method comprising indicating to a user of the mobile station whether said enciphered mode of communication for user data is set on or off using the display unit, and indicating a change in ciphering mode for user data to a user of the mobile station using the acoustic signal forming element".

However, Lewis discloses "the mobile station comprises a display unit and an acoustic signal forming element, the ciphering mode used in data communication between the mobile communication network and the mobile station is indicated with the display unit, and a change in ciphering mode is indicated with the acoustic signal forming element" in (Col 10 lines 53-67, Col 20 lines 10-15, and Col 16 lines 40-67).

Therefore, it would have been obvious at the time of the invention was made for one ordinary skill in the art to incorporate Sasuta et al., Talbot, and Rasmussen et al. with Lewis to display the information for alerting the user.

**As per claim 34:**

Sasuta et al., Talbot, and Rasmussen et al. disclose "a method according to claim 32". Sasuta et al., Talbot, and Rasmussen et al. do not disclose, "comprising indicating a change in ciphering mode for user data is indicated with a flashing light".



However, Lewis discloses "a change in ciphering mode is indicated with a flashing light" in (Col 20 lines 10-15, and Col 16 lines 40-67).

Therefore, it would have been obvious at the time of the invention was made for one ordinary skill in the art to incorporate Sasuta et al. and Talbot with Lewis to display the information for alerting the user.

10. Claims 35 and 70 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sasuta et al., Talbot, Rasmussen et al. and further in view of Kniffin et al., US Patent No. 6072402, hereinafter "Kniffin"

**As per claims 35 and 70:**

Sasuta et al., Talbot, Rasmussen et al. disclose "a method and apparatus according to claims 28 and 68 characterized in that the means for indicating a change in the cipher mode for user data by the flashing light and vibration. Sasuta et al., Talbot, Rasmussen et al. do not teach a change in the cipher mode causing to generate vibration caused by vibration battery.

However, Kniffin discloses "Secure Entry System with Radio Communications" invention, which including a signaling means to alert the user, such as beeping, vibrating, or displaying in (Col 7 lines 10-15, and Col 10 lines 10-20).

Therefore, it would have been obvious at the time of the invention was made for one having ordinary skill in the art to incorporate alert mechanism in Kniffin with Sasuta et al., Talbot, Rasmussen et al. for sensing different event and conveniently alerting the user.

11. Claim 45 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sasuta et al., Talbot, and Rasmussen et al. and further in view of Serbetciouglu et al, US Patent No. 5719918, hereinafter "Serbetciouglu",

**As per claim 45:**

Sasuta et al., Talbot, and Rasmussen et al. disclose "a method according to claim 44".

Sasuta et al., Talbot, and Rasmussen et al. do not expressly disclose the remaining limitation of the claim.

However, Serbetciouglu disclose "a method according to claim 44, wherein the first type of user data communication is a telephone call and said second type of user data communication is a short message (SMS)" in (Serbetciouglu, Col 7 lines 10-15).

Therefore, it would have been obvious at the time of the invention was made for one having ordinary skill in the art to incorporate Sasuta et al., Talbot, and Rasmussen et al. with Serbetciouglu to implement two types

of data ciphering communication in a wireless network for simultaneously working on different types of data.

12. Claims 37-43, 75-76, 80, 87-89, and 92 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sasuta et al., Talbot, and Rasmussen et al. and further in view of Kennedy et al, European Patent No. 0680171A2, hereinafter "Kennedy".

**As per claims 37, 75, and 87:**

Sasuta et al., Talbot, and Rasmussen et al. disclose "a method and apparatus according to claims 36, 74, and 86". Sasuta et al., Talbot, and Rasmussen et al. do not expressly disclose "the said cipher indication memory block makes an interrupt request responsive to a detecting that a new value has been set in the cipher mode indication data field".

However, Kennedy discloses said cipher indication memory block makes an interrupt request in response to a change in the cipher mode indication data field in (Col 4, lines 8-13).

Therefore, it would have been obvious at the time of the invention was made for one having ordinary skill in the art to modify Sasuta et al., Talbot, and Rasmussen et al. to incorporate Kennedy's feature to electronically controller the mode of the communication.

**As per claims 38, 41, 76, 88, and 92:**

Sasuta et al., Talbot, Rasmussen et al., and Kennedy disclose “a method and apparatus according to claims 37, 40, 75, 87, and 86 wherein the user interface block detects said interrupt request and sends an inquiry about the cipher mode to the cipher indicator memory block and the cipher indicator memory block returns data on the cipher mode to the user interface block in response to said inquiry” in ((Col 4 line 5 to Col 5 line 28 from Kennedy) and (Col. 3 line 24-39; Col. 3, line 60 to Col. 4 line 17; Fig. 1 from Sasuta et al.) and (Col. 3, lines 8-25; Col. 7, lines 7-25; and Fig. 3 from Rasmussen et al.)).

**As per claims 39, 40, and 43:**

Sasuta et al., Talbot, Rasmussen et al., and Kennedy disclose “a method and apparatus according to claims 36, 38, and 42, wherein the user interface block is configured to set the cipher mode indicator to a mode corresponding to the cipher information provided by the cipher mode indicator memory block (Col. 3, lines 27-39; Col. 3, line 60 to Col. 4, line 38; Fig. 1 from Sasuta et al.) and (Col. 3, lines 8-25; Col. 7, lines 7-25; and Fig. 3 from Rasmussen et al.).

**As per claims 42 and 80:**

Sasuta et al., Talbot, and Rasmussen et al. disclose "a method and apparatus according to claims 36 and 74, wherein the user interface block sends cipher mode inquiry message to the cipher indicator memory block about the state of the cipher mode indication data field ((Col. 3 line 24-39; Col. 3, line 60 to Col. 4 line 17; Fig. 1 from Sasuta et al.) and (Col. 3, lines 8-25; Col. 7, lines 7-25; and Fig. 3 from Rasmussen et al.)).

Sasuta et al., Talbot, and Rasmussen et al. do not expressly disclose the remaining limitation of the claim.

However, Kennedy disclose each inquiry being separated in time from the next by a predetermined interval and the cipher indication memory block is operable to return an indication of the state of the cipher mode indication data field in response to each inquiry" in (Col 4 line 5 to Col 5 line 28 from Kennedy).

Therefore, it would have been obvious at the time of the invention was made for one having ordinary skill in the art to incorporate the features in Kennedy to Sasuta et al., Talbot, and Rasmussen et al. to electronically control the mode of the communication.

**As per claim 89:**

Sasuta et al., Talbot, Rasmussen et al., and Kennedy disclose "an apparatus according to claim 88 wherein the user interface block is configured to set the cipher mode indicator to a mode corresponding to the cipher information provided by the cipher mode indicator memory block (Col. 3, lines 27-39; Col. 3, line 60 to Col. 4, line 38; Fig. 1 from Sasuta et al.) and (Col. 3, lines 8-25; Col. 7, lines 7-25; and Fig. 3 from Rasmussen et al.).

**Note:** *Examiner has pointed out particular references contained in the prior arts of record and in the body of this action for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. Applicant should consider the entire prior art as applicable to the limitations of the claims. It is respectfully requested from the applicant, in preparing for response, to consider fully the entire reference as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior arts or disclosed by the Examiner.*

**Conclusion**

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Dimolitsas et al. (U.S. Patent 5,404,394) disclose a communication system including: a first secure communication terminal for providing analog voiceband data; a first processing circuit connected to receive the secure data from the first secure communication terminal and for converting the received data into secure baseband data, the first processing circuit transmitting the baseband data; a second processing circuit connected to receive the transmitted baseband data from the first processing circuit, and for converting the received baseband data into analog voiceband data; and a second secure communication terminal for receiving the analog voiceband data from the second processing circuit. The communication system is especially applicable for handling secure data transmitted by a STU-III.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yin-Chen Shaw, whose telephone number is (571) 272-8593. The examiner can normally be reached on Monday-Friday from 9:30 AM - 6:30 PM Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edan Orgad can be reached on 571-272-7884.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
P.O. Box 1450  
Alexandria, VA 22313-1450

**Or faxed to:**

(571) 273-3800

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

YCS

Jul. 28, 2010

/Yin-Chen Shaw/  
Examiner, Art Unit 2439